

Remarks

Claims 1-9 and 38-45 are pending. Claims 46-56 have been added. Claims 1-3, 5-7, 38, 39, and 41-45 have been amended. Claim 4 has been cancelled without prejudice to or disclaimer of the underlying subject matter. Support for the amended claims can be found throughout the specification, for example, at page 6, paragraph [00026], and in the claims as originally filed. No new matter enters by way of the present amendment. Upon entry of the foregoing amendment, claims 1-3, 5-9, and 38-56 will be pending.

1. Election/Restriction

Applicants acknowledge that “[c]laims 1-9 and 38-45 and the patentably distinct species PSR 6425 are under examination,” but maintain their traversal as set forth in the response filed on July 13, 2005. *Office Action*, at page 2.

2. Objections to the Claims and Specification

Claims 38-43 have been objected to for alleged informalities. *Office Action* at page 2. In light of foregoing amendments, applicant respectfully requests withdrawal of the objection to the claims.

The disclosure is objected to because three (3) lettuce lines allegedly “share the same Deposit Number (i.e. PTA-3248).” *Office Action* at page 3. The Examiner argues it is unclear “which line is represented by this Accession Number.” *Id.* Although Applicant disagrees, a replacement deposit of lettuce lines PSR 6425, PSR 6595, and

PSR 6032 will be submitted with a depository in accordance with 37 C.F.R. § 1.805, prior to the payment of the issue fee.

3. *Double Patenting*

Claims 1-4 and 6-9 stand rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 and 8-16 of U.S. Patent No. 6,689,941. *Office Action* at page 3. Applicant reserves the right to traverse or file a terminal disclaimer at a later time upon indication of allowable subject matter.

4. *Claim Rejections - 35 U.S.C. § 101*

Claims 1-7 have been rejected under 35 U.S.C. § 101 because the claimed invention is allegedly “directed to non-statutory subject matter.” *Office Action* at page 4. Applicants respectfully disagree.

The Examiner alleges that “[c]laim 1 is broadly drawn to any iceberg lettuce plant with the limitation only that it comprises a trait of a first outer layer having a length to width ratio characteristic, wherein said plant may naturally occur, without the requirement of manipulation by the hand of man.” *Id.* Applicant respectfully disagrees, however, to facilitate prosecution, claims 1-7 have been amended to recite an “iceberg lettuce cultivar.”

As such, the rejections of claims 1-7 under 35 U.S.C. § 101 as being drawn to non-statutory subject matter is moot. Applicant respectfully requests reconsideration and withdrawal of this rejection.

5. *Rejections under 35 U.S.C. § 112, first paragraph, Written Description*

Claims 1-7 and 41-45 stand rejected under 35 U.S.C. § 112, first paragraph as allegedly containing “subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” *Office Action* at page 5. Applicants respectfully disagree.

The Examiner alleges that the specification does not describe the invention of claims 1-7 because “the specification fails to provide a written description regarding the genetic, morphological, and/or physiological characteristics of the broad genus of iceberg lettuce plants with one or more of the claimed characteristics.” *Id.* With regard to claims 41-45 the Examiner alleges that the “specification does not describe the other lettuce plant or plants that are to be crossed with PSR 6425 nor is there a description of their genetic, morphological, and/or physiological background.” *Id.* at page 6. The Examiner further argues that “[s]ince the claimed invention is derived from crossing PSR 6425 with any lettuce plant, there could conceivably be thousands of hybrids, each with different genetic, morphological, and/or physiological characteristics due to each having different ‘other’ parents and the specification does not describe these hundreds of hybrids.” *Id.* Applicants respectfully disagree.

The specification and claims as originally filed adequately support the claimed invention. For example, the specification discloses numerous physiological characteristics of the iceberg lettuce cultivars, for example, an iceberg lettuce cultivar having a first outer leaf having a length to width ratio between about 1.2 to about 2.7. *See, e.g.*, specification at page 9, paragraph [00044]. In addition, the specification describes additional embodiments of the iceberg lettuce cultivars, such as spatulate leaf shapes, elliptical leaf statures, leaf colors, and head formations. *See*, specification at page 9, paragraph [00042] through page 10, paragraph [00046]. Moreover, the specification exemplifies *L. sativa* cultivars having a first outer leaf having a length to width ratio between about 1.2 and about 2.7. *See, e.g.*, specification at page 17, Table 3, page 15, Table 2, page 19, Table 4, page 21, Table 5, and page 13, Table 1. The specification further discloses and exemplifies other embodiments of the iceberg lettuce cultivars, such as resistance to corky root rot and lettuce mosaic virus. Specification at page 7, paragraph [0032], page 22, paragraph [00065], through page 25, paragraph [00080]. Thus, there is no deficiency in the written description support for the iceberg lettuce cultivars. Therefore, claims 1-7 satisfy the written description requirement of 35 U.S.C. § 112, first paragraph.

The Examiner also argues that claims 41-45 are not described apparently because the “specification does not describe the other lettuce plant or plants that are to be crossed with PSR 6425 nor is there a description of their genetic, morphological, and/or other physiological background.” *Office Action*, at page 6. As set forth above, the specification describes, *inter alia*, lettuce line PSR 6425, and provides numerous

characteristics of the line, such as leaf length to width ratios between about 1.2 to about 2.7, as well as disease resistance, and other characteristics. Based on Applicants disclosure and knowledge of the art, the person of ordinary skill in the art would be aware of the numerous lettuce varieties that can be used in breeding programs with an iceberg lettuce cultivar of PSR 6425. *See, Capon v. Eshhar*, 418 F.3d 1349 (Fed. Cir. 2005). Again, there is no deficiency in the written description support for the claimed invention. Therefore, claims 41-45 also satisfy the written description requirement of 35 U.S.C. § 112, first paragraph.

For these reasons, claims 1-7 and 41-45 satisfy the written description requirement of 35 U.S.C. § 112, first paragraph. As such, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, first paragraph for the alleged lack of written description.

6. *Rejections under 35 U.S.C. § 112, first paragraph, Enablement*

Claims 1-9 and 38-45 also stand rejected under 35 USC § 112, first paragraph, as allegedly not being enabled by the specification commensurate with the scope of the claims. *Office Action* at pages 8-14. This rejection is respectfully traversed for at least the reasons which follow.

The Examiner alleges that the “specification does not disclose a repeatable process to obtain the plant and it is not apparent if the plant is readily available to the public.” *Id.* at page 8. The Examiner further requires that “[a] deposit of 2500 seed of

each of the claimed embodiments is considered sufficient to ensure public availability.”

Id.

Applicants will provide a Deposit Declaration with an attached copy of the Receipt of an Original Deposit, indicating that lettuce cultivar PSR 6425 has been deposited upon an indication that the subject matter is otherwise allowable. In light of the filing of this Applicants request that this rejection under 35 U.S.C. § 112, be held in abeyance.

In addition, the Examiner alleges that claims 1-9 and 41-45 are not enabled by the specification commensurate with the scope of the claims. *Office Action* at pages 10-14.

Despite the Examiner’s acknowledgement that the specification provides “guidance regarding the morphological and/or physiological characteristics of the lettuce breeding lines PSR 6425, PSR 6595 and PSR 6032,” the Examiner argues with respect to claims 1-9 that “[t]he specification fails to provide any guidance regarding the genetic, morphological, and/or physiological characteristics of the broad genus of iceberg lettuce plants with one or more of the claimed characteristics; therefore, any methods of making or using said plants are not enabled.” *Office Action*, at page 10.

The Office Action asserts that with respect to claims 41-45 “[t]he specification does not provide any guidance with regards to the other lettuce plant or plants that are to be crossed with PSR 6425 nor is there any guidance regarding their genetic, morphological, and/or physiological background” nor for the claimed hybrids. *Id.*, at page 11. The Examiner concludes that “[g]iven the claim breadth, the lack of guidance regarding the use of the broad genus of iceberg lettuce plants, the lack of evidence

regarding the broad genus of iceberg lettuce plants, and the unpredictability of producing iceberg lettuce plants having various characteristics, undue trial and error experimentation would be required by one skilled in the art to make and/or use the claimed invention.” *Id.* at page 14. Applicants respectfully disagree and submit that the specification is enabling for an iceberg lettuce cultivar as claimed.

The specification discloses sufficient guidance to produce the claimed lettuce cultivars. For example, the specification describes methods for breeding iceberg lettuce cultivars of the present invention, such as pedigree selection methods and discloses selection criteria that can be employed in such methods. *See*, specification at page 6, paragraph [00026] through page 7, paragraph [00031]. Moreover, the specification describes numerous characteristics of the iceberg lettuce cultivars of the present invention, for example, leaf shape and color, leaf length to width ratio, and disease resistance. *See*, Specification at page 9, paragraph [00042] through page 10, paragraph [00046]. In addition, the specification provides working examples of the preparation of iceberg lettuce cultivar PSR 6425, as well as other iceberg lettuce cultivars within the genus of claimed iceberg lettuce cultivars. *See, e.g.*, Specification at page 10, paragraph [00048] through page 22, paragraph [00064]. As such, the specification provides ample guidance to the skilled artisan to produce the broccoli plants as presently claimed.

The Examiner argues that the “specification does not provide any guidance with regards to the other lettuce plant or plants that are to be crossed with PSR 6425 nor is there any guidance regarding their genetic, morphological, and/or physiological background.” *Office Action* at page 11. As set forth above, Applicant has described the

claimed iceberg lettuce cultivars. The skilled artisan would be able to obtain F₁ hybrids using such cultivars without undue experimentation. It is well established that Applicants need not teach conventional and well-known techniques (*see, e.g., Ajinomoto Co. v. Archer-Daniels-Midland Co.*, 228 F.3d 1338, 1345, 56 U.S.P.Q.2d 1332, 1337 (Fed. Cir. 2000)), which would include lettuce breeding techniques for obtaining F₁ hybrids of the iceberg lettuce cultivars, as well as parameters for selecting parents for use in such techniques. Thus, the specification provides ample guidance to the skilled artisan to render the claimed iceberg lettuce cultivars enabled.

The Examiner relies on Kevern (U.S. Patent No. 5,850,009), Carlone (U.S. Patent No. 5,763,755), Segebart (U.S. Patent No. 5,304,719), and Segebart (U.S. Patent No. 5,367,109) to support the proposition that “genetic variation among individual progeny of a breeding cross allows for the identification of rare and valuable new genotypes but that these new genotypes are neither predictable nor incremental in value, but rather the result of manifested genetic variation combined with selection methods, environments and the actions of the breeder.” *Office Action* at pages 12-13. While the references cited by the Examiner discuss difficulties in progeny selection in corn breeding programs, the Examiner has provided no nexus between the cited references relating to corn breeding with iceberg lettuce breeding programs. Accordingly, the Examiner’s reliance on the cited references is misplaced.

The Examiner also points to language in the instant specification to support the argument that “[t]he specification teaches that methods of producing iceberg lettuce plants having various characteristics are unpredictable.” *Office Action* at page 13.

However, the Examiner reads the passages out of context and appears to ignore that the cited passages indicate the problems associated with lettuce breeding that the teachings of the present invention overcome. As such, the Examiner's reliance on the statements in the specification are misplaced as well.

Moreover, the Examiner relies on Ryder, *et al.* to support the proposition that "epistatic interactions between genes which confer a 'sickly' phenotype were epistatic to different genes for leaf color, as well as to those genes which confer traits for growth habit and leaf shape." *Office Action*, at pages 13-14. However, the Examiner does not correlate this alleged epistatic interactions discussed in Ryder to any epistatic interactions between the characteristics of the claimed iceberg lettuce cultivars. As discussed above, the specification provides ample guidance for the production of the claimed hybrid lettuce plants, parts thereof, and seeds. As such, the Examiner's reliance on Ryder *et al.* is misplaced.

Accordingly, for at least these reasons, the enablement rejection of claims 1-9 and 38-45 under 35 USC § 112, first paragraph, is traversed, and reconsideration and withdrawal of this rejection is respectfully requested.

7. Rejections under 35 U.S.C. § 112, second paragraph

Claim 44 has been rejected under 35 U.S.C. § 112, second paragraph as allegedly "being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." *Office Action* at page 14.

Claim 44 is allegedly indefinite in the recitation of “said parent line” because there is allegedly “insufficient antecedent basis.” *Id.* Applicants respectfully disagree. Applicants respectfully point out that the claims are to be read in light of the specification. *See in re Vogel*, 422 F.2d 438, 441, 164 U.S.P.Q. 619, 622 (C.C.P.A. 1970). The test for determining whether terms in a given claim are indefinite is whether one skilled in the art would understand what is claimed. *Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 18 U.S.P.Q.2d 1016 (Fed. Cir. 1991), *cert denied*, 112 S.Ct. 169 (1991). A person of ordinary skill in the art would understand the metes and bounds of the claims read in light of the disclosure of the specification. Although applicant disagrees, to facilitate prosecution, applicant has amended claim 44 to recite “said one or more parents.” As such, applicant submits that the rejection of claim 44 under 35 U.S.C. § 112, second paragraph is moot.

Applicant therefore respectfully requests reconsideration and withdrawal of the indefiniteness rejection of claim 44 under 35 U.S.C. § 112, second paragraph.

8. *Rejections under 35 U.S.C. § 102*

Claims 1-3 and 6-9 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Bassett (J. Amer. Soc. Hort. Sci. 100(2): 104-105, 1975) (hereinafter “Bassett”). *Office Action* at page 15. Applicant respectfully disagrees.

For a prior art reference to anticipate in terms of 35 U.S.C. § 102, each and every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990); *Diversitech Corp. v. Century Steps*,

Inc., 850 F.2d 675, 677, 7 U.S.P.Q.2d 1315, 1317 (Fed. Cir. 1988). Indeed, it is well-established law that an anticipatory reference “must describe the applicant’s claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it”. *In re Paulson*, 31 U.S.P.Q.2d 1671 (Fed. Cir. 1994); *In re Spada*, 911 F.2d 705, 708, 15 U.S.P.Q.2d 1655, 1657 (Fed. Cir. 1990). The Office has not demonstrated that Bassett teaches each and every element of the claimed invention, and therefore the anticipation rejection is improper.

The Office alleges that “Bassett discloses that at least one of the F2 progeny had a leaf length/width ratio of 1.5 and comprised an iceberg plant with a semi-open head, elliptical stature, and spatulate leaf shape.” *Office Action*, at page 15. Applicants respectfully disagree. However, to facilitate prosecution, Applicant has amended claim 1. Whatever else Bassett might disclose, it does not disclose an iceberg lettuce cultivar, or a part thereof, having a first outer leaf having a length to width ratio between about 1.2 to about 2.7 further comprising an outer leaf having a color which ranges from about RHS 146A to about RHS146B.

Indeed the Examiner acknowledges, Bassett does not disclose an iceberg lettuce cultivar, or a part thereof, having a first outer leaf having a length to width ratio between 1.2 to about 2.7 and an outer leaf having a color which ranges from about RHS 146A to about RHS146B. Accordingly, Bassett fails to teach each and every element of the claimed invention, and therefore does not anticipate claims 1-3 and 6-9.

Accordingly, for at least the foregoing reasons, the rejection of claims 1-3 and 6-9 under 35 U.S.C. § 102(b) over Bassett is improper. Reconsideration and withdrawal of this rejection are respectfully requested.

9. *Rejections under 35 U.S.C. §§ 102/ 103*

Dependent claims 41-45 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over Bassett (J. Amer. Soc. Hort. Sci. 100(2): 104-105, 1975). *Office Action* at page 16.

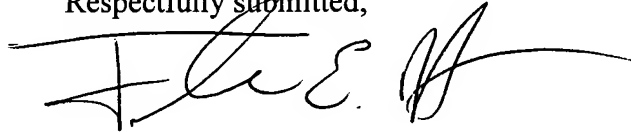
Although Applicant respectfully disagrees, Applicant notes that, as discussed above, independent claim 1 has been amended. Whatever else Bassett *et al.* discusses, it does not disclose, or suggest, an F₁ hybrid *Lactuca sativa* or iceberg lettuce plants having as one or more parents a *Lactuca sativa* L. plant grown from the seed of *L. sativa* L. line PSR 6425, PSR 6595, or PSR 6032.

Accordingly, for at least the foregoing reasons, the rejection of claims 41-45 under 35 U.S.C. §§ 102 and 103 is improper. Reconsideration and withdrawal of this rejection are respectfully requested.

CONCLUSION

In view of the foregoing arguments and amendments, each of the presently pending claims is believed to be in immediate condition for allowance. All of the stated grounds of rejection have been traversed, accommodated, or rendered moot. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue. The Examiner is encouraged to contact the undersigned at 202.942.5085 should any additional information be necessary for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'T. E. Holsten', with a long horizontal flourish extending to the right.

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